Anomia ephippium.

Aporrhais pes-pelecani.—Very good specimens. Littorina obtusata.

Doggerbank shells may be had in the spring from Robert Morrison, the man on Filey Brigg.

(III.)

Crepidula.—Fine specimen. Brought by Stockdale fisherman from some rocks in the neighbourhood; locality uncertain. There are some in the Scarborough Museum, marked as found at Scarborough, but not native.

NOTES ON AUSTRALIAN SPECIES OF *BITHINIA*, *SEGMENTINA* AND *FUSUS*, AND DESCRIPTION OF A NEW *MELANIA*.

By EDGAR A. SMITH, F.Z.S. Zoological Department, British Museum.

In the list of Australian species of the genus *Bithinia*, which I published in the Journal of the Linnean Society, Zoology, vol. xvi., 1881, pp. 266, 267, I omitted to mention *B. victoria*, described by Tennison-Woods.* This omission was the result of relying upon "the Zoological Record," in which no mention was made of the publication of this species.

The British Museum has recently received from Mr. John Brazier, of Sydney, two series of *Bithinia*, the one from Eastern Creek, New South Wales, which he informs me consists of typical examples of his *B. hyalina*, the other from Parramatta Park, Parramatta, New South Wales, comprising specimens of the species described by Tryon, as *Gabbia australis*.

On carefully comparing these two series I fail to discover any distinguishing features in the shells, and therefore unite them under the name of *Bithinia australis*.

^{*} Trans. and Proc. Roy. Soc. Victoria, 1878, vol. xiv., p. 65.

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The generic division *Gabbia*, proposed by Tryon for this species, appears to be altogether unnecessary. The character upon which he founded the group was a supposed peculiarity in the operculum which he describes† as "paucispiral, calcareous." His own figure and the shells before me show that the operculum is *not* paucispiral, but normally concentric, as in other species of *Bithinia*. Such being the case, the genus *Gabbia* may be cast aside, but as the specific name imposed upon this species must, according to the laws of priority be retained, it becomes necessary to re-name the form from Victoria River, which I described as *B. australis*; this I would therefore propose should be called *B. tryoni*.

Messrs. Tate and Brazier, in their Check List of the Freshwater Shells of Australia,[‡] have already recognised the inutility of the section *Gabbia*.

Segmentina australiensis.

A large series of specimens from Waterloo, Sydney, which I consider belong to this species, differ from the type in some respects. None of them are of so dark a colour, and not a single specimen has the internal lamellæ nearly so strongly developed. Some have only two very small tubercles, one upon the upper and one upon the lower wall of the body-whorl; others are entirely destitute of teeth of any description, and but very few exhibit the parietal lamella so conspicuous in the type. The greater or less development of these internal processes is probably regulated by age, so that in old shells they would more frequently be present, and more strongly developed than in younger specimens.

In a second series from Bundaberg, Queensland—also presented to the Museum by Mr. Brazier—I cannot detect a single example with any indication of teeth, but in all other respects these shells agree exactly with those from Waterloo.

⁺ American Journ. Conch., 1865, vol. i., p. 220, pl. 22, f. 7.

[#] Proc. Linn. Soc., New South Wales, 1882, vol. vi., p. 562.

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The second Australian species of *Segmentina*, which I described as *S. victoriæ*, is also characterised by the total absence of these internal processes, but, as shewn in the figure, it is somewhat different in having more tightly coiled whorls (vide l. c., fig. 12), but to determine whether this is an individual rather than a specific character requires further material, for at present the species is known only by the unique specimen in the British Museum.

Melania supralirata.

Testa elongata, turrita, decollata, nigra, vel saturate olivacea; anfractus persistentes 5—6, superne constricti, inferne convexi, prominentes, infra suturam sulcis duabus conspicuis spiralibus sculpti, undique minutissime transversim striati, lineisque incrementi tenuibus decussati, ultimus parvus, ad basim sulcis paucis sculptus; apertura rotunde ovata, superne acuminata, antice acuminate effusa, intus sordide cærulea; labrum tenue, superne late sinuatum; columella arcuata, cæruleo-albida.

Longit. anfract. sex 24 mill., diam. 9; apertura 7 longa, 5 lata. Hab.: Prince of Wales Island, Torres Straits.

This species is remarkable for the shortness and peculiar shape of the whorls. They are slopingly contracted above, and bulging below the middle, somewhat as represented by Reeve's figure of *M. Wallacei* ('Conch. Icon.' fig. 66). Besides the two grooves at the upper part of the whorls, others are sometimes more or less traceable over the rest of the surface. The ridge between the two sulci is in some specimens inclined to be nodulous. *M. Sooloensis* is another species which has some affinity with the present; in that, however, which is a smoother shell, the bulge or convexity of the volutions is higher up. From evidence afforded by some young specimens, the number of whorls in an adult shell, if not decollated, would be eleven.

Fusus Pricei.

Fusus corpulentus, Smith (non Conrad), "Annals and Mag. Nat. Hist.," May 1882, vol. ix., p. 344. Since describing this fine shell I have discovered that the specific name had been previously used by Conrad,* for a fossil species from Oregon, North America, but whether that form really belongs to *Fusus* is very uncertain, for Mr. Dall,† of the Smithsonian Institution, observes respecting it :—"This consists of the *internal cast* of a species of Mollusk, which may be a *Pleurotoma*, or almost anything else of a fusiform shape." However, to prevent any further difficulty, I think it best to re-name the living species, and have, therefore, associated with it the name of Mr. Charles Price, from whom the British Museum recently received two specimens of this species. These were collected either at Cleveland Bay, Queensland, or at Port Moresby, S.E. of New Guinea. The habitat of the type was unknown.

Occurrence of Vertigo alpestris Alder in Yorkshire .- On May 1st of the present year, Mr. H. T. Soppitt, of Bradford, was fortunate in adding this species to the Yorkshire The locality is the top of a mossy ivy-covered wall at list. Cottingley, near Bingley, where the shells are found attached to the dead leaves and stems of the ivy. There is a rich vegetable humus on the wall, into which the Vertigo may penetrate in dry weather. It appears to be quite gregarious in its habits, and in favourable weather four or five specimens may be had from a single handful of leaves. It is associated with Helix rufescens, Zonites crystallinus Vitrina pellucida and Clausilia rugosa. The vegetation on the wall consists of a few nettles, Arenaria trinervis, Saxifraga tridactylites and Polypodium vulgare. The altitude is about 300 feet, and the formation of the district millstone grit, with which stone the wall itself is built. Mr. J. A. Hargreaves first separated these specimens from V. pygmea, with which they were at first confounded .-- JNO. W. TAYLOR, Oct. 10th, 1887.

* Geol. U.S. Explor. Exped., vol. x, p. 728, pl. 20, fig. 4. + Proc. Calif. Acad. Sci., 1877, p. 3.